Fischer, only 4 refer to the right ventricle); (3) that in his case there were present such predisposing causes as fatty degeneration of the muscular substance with hypertrophy of the heart and thickening of the valves, increased cardiac action and intracardiac pressure under the influence of alcohol; (4) that the rupture took place during an early stage of a systole, since there was present a pericardial ecchymosis which evidently had resulted from violence having occurred at the moment when the heart had been as near as possible to the thoracic wall; (5) that the fatal issue was caused by the heart having been compressed and arrested by the blood extravasated into the pericardial sac.

VALERIUS IDELSON.

THE TREATMENT OF CEREBRAL ABSCESS.

At a meeting of the Berlin Medical Society, Dec. 5, 1888, Professor von Bergmann[1] presented a patient on whom he had successfully opened the cranial cavity for the evacuation of a previously diagnosed abscess. He stated that cerebral abscess was never a primary disease, but always secondary, and so a sequence to some antecedent trouble. These pre-existing troubles always exist, and are often markedly characteristic. The so-called idiopathic abscesses are usually the products of cerebral tuberculosis, though tubercular deposits appear as a rule as dry caseous masses, and rarely go on to the formation of sufficient pus to give rise to the symptoms of abscess.

There are three disturbances which precede the formation of abscess in the substance of the hemispheres. These are 1. Purulent processes in and around the cranial bones. 2. Injuries of the soft parts, of the bones of the skull, and its contents. 3. Suppuration in the course of the lesser circulation, such as abscess of the lung, fœtid bronchitis, severe and protracted empyema.

Among these three etiological factors, suppuration in the mastoid, otitis media suppurativa plays the most important part and is responsible for nearly one half of the cases.

The greatest number of cases of cerebral abscess, consequent to

[1]Deutsche Med. Wochenschrift, No. 50, 1888.

chronic suppuration of the ear, are situated at some distance from the original centre of suppuration, and lie deep in the substance of the brain. Their seat is in the white substance and they are covered by unaltered gray matter. Barr collected 76 cases of cerebral abscess secondary to suppurative otitis. In 55 of these cases, the abscess was situated in the temporal lobe ; in 13, in the cerebellum ; in 4, both in the brain and cerebellum ; in 2, in the pons, and in one case in the crura cerebri. The place where the abscess is situated depends upon where the original suppuration began in the ear. If it began at the upper surface of the petrous bone, the tegmen tympani, the temporal lobe will most probably be the seat of the abscess, if on the contrary the pus occupies the cells of the mastoid, the probabilities are in favor of an abscess in the cerebellum. Brain abscesses manifest themselves by three sets of symptoms. 1. Those which are characteristic of pus formation in the body. 2. Those of increased cranial pressure, which, however, are not present in small abscesses. 3. Disturbances in the function of the affected part of the brain.

The last group of symptoms is important in the localization of the lesion.

The case presented by Prof. Bergmann was as follows:

The patient, a thin and somewhat anæmic turner, aged 29, had suffered since his 15th year from a purulent discharge from the right ear, which gave him little trouble, but varied in quantity from time to time. During the three weeks preceding his admisssion to the hospital the patient suffered from severe earache accompanied by attacks of dizziness. He felt tired and sick toward evening, lost his appetite and experienced frequent feelings of heat and cold. For the last few days he complained of a continuous headache which was so severe that it prevented him from sleeping ; this headache was most marked on the right side. When admitted to the hospital he appeared apathetic and only answered questions with great difficulty, and was scarcely able to raise his head. There was slight icterus, tongue thickly coated, temperature 39.7 C., respiration 24, pulse 50 to the minute. When the patient was requested to raise his arms, the left sank down rapidly, while the right remained in the desired position. During the examination

there were spasms of the muscles supplied by the facial nerve on the right side No deviation of the tongue, pupils normal.

In the right auditory meatus there was plenty of foul smelling pus ; when this was removed, the cavity was found filled with easily bleeding granulations. Bare bone not to be found by the probe. Mastoid process is not swollen or tender on pressure, exploration of the granulations painful. Hearing almost completely abolished in this ear. Percussion over a circumscribed area, on the right side, covered by the pinna is intensely painful.

There could be no doubt that this was an acute exacerbation of an old chronic process. Suppuration of the mastoid was excluded on account of the absence of pain on pressure, swelling and cutaneous œdema.

All the above mentioned symptoms pointed toward an abscess of the brain, and one seated in the temporal lobe. A positive diagnosis was inadmissible as positive symptoms pointing to the destruction of the temporal lobe were missing; nevertheless a large part of that lobe may be destroyed without interfering markedly with the functions of the brain. In a general way it may be assumed that large abscesses in the temporal lobe increase the pressure in the entire cranial cavity by increasing the tension of the cerebro-spinal fluid. But this pressure is also transmitted through the semi-solid brain substance, though in a less uniform manner, so that the cerebral areas in the immediate neighborhood of the temporal lobes are more involved than those situated at some distance. The disturbances of motion and sensation which occurred on the patient's left side pointed to disease of the right hemisphere, and the symptoms of intracranial pressure, especially the slow pulse, showed that the abscess had reached a considerable size, and the author judged best to perform an early operation.

If a tangent be drawn from the posterior border of the auricle, and another from the highest point on its superior border, the lines will meet above and somewhat anteriorly to the posterior inferior angle of the parietal bone. In this space a large square of bone was removed by means of the chisel. The dura, when exposed, pulsated distinctly and appeared normal. When it was incised the extremely soft cerebral

substance was forced out; an incision into this gave blood but no pus. The knife was introduced three times before the abscess was found; it was situated somewhat anteriorly to the wound; the abscess contained about 30 cc., of greenish-yellow fœtid pus. Digital examination revealed a smooth cavity surrounded on all sides by soft tissue. The cavity was carefully filled by iodoform ether, and a drainage tube introduced about 1 cm. Around the drainage tube iodoform gauze was loosely packed. The operation was performed under the strictest antiseptic precautions, and all bleeding points were immediately secured.

After the evacuation of the pus, the pulse at once rose to 54, and four hours later it was 88 to the minute. When the patient emerged from the narcosis he stated that his headache had entirely disappeared, and it has not returned since.

The dressing was changed daily, and the drainage tube shortened on the 9th day. The whole progress of the case was extremely favorable, no headache, no fever, no hernia cerebri, and in less than six weeks the wound was completely cicatrized.

The patient has yet a slight purulent discharge from his right ear, but this is being treated with astringent and antiseptic measures. The granulations in the cavity of the tympanum have been removed with a sharp spoon, and the surface cauterized. Prof. Bergmann proposes to keep the patient in the hospital until his ear trouble has been perfectly cured. F. C. HUSSON.

CANCER OF THE LARYNX.[1]

Cancer of the larynx is very ably reviewed by M. Baratoux in a series of articles in the *Progres Medical.* A historical sketch is prefixed containing references to all the important publications on the subject, from the early observationss of pre-laryngoscopic days to the present time. As to the frequency of malignant disease of the larynx it cannot be considered great. Krishaber recorded 50 cases, Morell

[1]Cancer of Larynx. By M. J. BARATOUX. *Le Progres Medical,* May, June and July, 1888.